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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,890	10/17/2003	Thomas Baumgartner	5689-280	9799

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EXAMINER

DAVIS, JENNA L

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/687,890	Applicant(s) BAUMGARTNER ET AL.	
	Examiner Jenna Davis	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 19-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 37-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's amendment filed on June 5, 2006, has been entered. Claims 1 to 41 are pending. Claims 1, 37, and 41 have been amended. Claims 19 to 36 are non-elected without traverse and are withdrawn from consideration.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13 and 40 recite "CMD yarn" which is indefinite as to scope and meaning. It is assumed that this term refers to cross machine direction yarn and will be treated as such in this Office action. It is recommended that "CMD" be replaced with "cross machine direction" if this is what is intended. Such an amendment would overcome this rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 to 3, 8, and 14 to 18 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,187,618 to Diehl.

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Diehl discloses a felt comprising a set of fine top machine direction yarns -13- and coarser bottom machine direction yarns -15- interwoven with fine cross machine direction yarns -20- in a plurality of repeat units (Abstract and Figure 5). A nonwoven batting -25- overlays the top machine direction yarns (Abstract and Figure 5). Each of the fine cross-machine direction yarns (20) interweaves with both top and bottom machine direction yarns (13, 15). With regard to claim 2, the bottom machine direction yarn may be multifilament yarn (column 4, lines 17-21) and can be twisted (column 3, line 18). With regard to claim 3, the bottom machine direction yarn may have a denier of 840 (column 4, line 20) which falls within the range claimed here. With regard to claim 8, the ratio of top machine direction yarns to bottom machine direction yarns may be 2:1 (column 3, lines 35-36). With regard to claim 14, Diehl teaches a duplex weave may be used (column 3, line 16). With regard to claim 15, one can define Figure 5 of Diehl as a repeating unit. There are two knuckles present from the cross machine direction yarn. With regard to claim 16, one bottom machine direction yarn separates the two knuckles. With regard to claim 17, two knuckles from the cross machine direction yarn are also formed over the top machine direction yarn as shown in Figure 5. With regard to claim 18, one could define a repeating unit to comprise multiple two-knuckle floats over the top machine direction yarns as shown in Figure 5.

Claim 1 now requires a single set of fine cross machine direction yarns. This reads on the Diehl patent since only a single set of *fine* cross machine direction yarn -20- is provided. The other cross machine direction yarn set -14- is described as being less fine than the fine cross machine direction yarns at column 3, lines 37-53. Thus, it is not seen that this recitation defines

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the claimed invention from the teachings of Diehl as the claims do not preclude the presence of a second set of coarser cross machine direction yarns.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 to 7, 9 to 13, and 37 to 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diehl in view of Gstrein (US patent 6,175,996).

With regard to claims 4-7, Diehl discloses the base fabric can have various types of yarn (column 3, lines 17-18), but fails to teach using monofilament yarns or yarns within the claimed diameter range. Gstrein teaches a felt comprising a base fabric having a batt needled into it (Abstract). Gstrein discloses the base fabric may comprise two sets of machine direction yarns interwoven with a cross machine direction yarn (column 4, lines 36-39). Gstrein teaches that weave pattern and yarn sizes and configurations are selected for the desired performance of the fabric (column 1, lines 42-47). Gstrein teaches that a suitable base fabric for the purposes of needling the batt has machine direction and cross machine direction yarns that are monofilamentary with a diameter up to 0.3 mm (column 3, lines 5-10). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use monofilament machine direction and cross machine direction yarns with a diameter up to 0.3 mm in the felt of Diehl in order to create a fabric that is well suited for being needled with a batting, as taught by Gstrein. With regard to claim 9, Diehl teaches that the batting may extend through

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the base fabric to the other side (column 4, lines 2-3). Gstrein teaches that it may be desirable to fully form a second batting layer on the other side of the base fabric (claim 12). It would have been obvious to a person having ordinary skill in the art at the time of the invention to further form a batt layer on the bottom side of the fabric of Diehl in order to use the felt in additional applications, as taught by Gstrein. With regard to claims 10-13 and 37-40, Diehl does not disclose using a triplex fabric. Gstrein teaches that duplex and triplex fabrics are both known in the felt art and are equally useful (column 4, lines 24-29). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a triplex construction in the fabric of Diehl as taught by Gstrein, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Diehl in view of Smart (US Patent 4,503,113).

Diehl explicitly teaches that the illustrations show there is one coarse strand for every two fine strands (column 3, lines 35-36) in the machine direction. However, Diehl does not disclose having a ratio of fine strands to coarse strands of between 3:1 and 5:1 in the machine direction. Smart also teaches a papermaker's felt comprising a woven base structure combined with a nonwoven batting (Abstract and Figure 1). Smart discloses that the ratio of yarns between a fine upper layer and a coarse middle layer may be between 2:1 and 4:1 (column 2, lines 47-49) in the machine direction. Smart teaches that finer yarn in the upper layer allows for adequate distribution of pressure to the upper batt layer (column 2, lines 39-42). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use a ratio of

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fine strands to coarse strands of up to 4:1 in the belt of Diehl in order to allow for a higher distribution of pressure to the upper batt layer, as taught by Smart.

Response to Arguments

Applicant argues that the present claims now require a single set of fine cross machine direction yarns that interweave both the bottom and top machine direction yarns. As pointed out in the rejection set forth above, it is not seen that this recitation defines the claimed invention from the disclosure of Diehl as the Diehl patent shows a single set of *fine* cross machine direction yarns that are provided in the same manner. The other set of cross machine direction yarns disclosed by Diehl are less fine than the set of yarns relied upon in the rejection. Since the term "fine" is relative, it is not seen that this recitation defines the claimed invention from the teachings of the Diehl patent. Thus, Diehl continues to anticipate the claims presented in this application.

The arguments regarding the terms that Diehl uses to describe the yarns used in his invention are not found persuasive as the structure of the felt disclosed by Diehl cannot be patentably distinguished from the felt that is presently claimed.

Applicant argues that the present invention is directed to fiber cement felt whereas Diehl is directed to papermaking felt. However, the recitation "fiber cement felt" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152,

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88 USPQ 478,481 (CCPA 1951). Although Applicant points out differences between papermaking felts and fiber cement felts, none of these differences are represented structurally in the claims.

In response to applicant's argument that Gstrein and Smart are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, all of Diehl, Gstrein, and Smart are directed to forming felts. A person having ordinary skill in the art would have appreciated that employing advantageous aspects of the references together would have been expected to produce a superior product.

The argument that a person having ordinary skill in the art would not have desired to produce duplex or triplex fabrics because simplex fabrics are less expensive to make is unpersuasive as the prior art, taken as a whole, clearly teaches that multilayer fabrics produce enhanced results in use compared to thin, easily compressed and worn fabrics.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna Davis whose telephone number is 571-272-3357. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jenna Davis/
Primary Examiner, Art Unit 1794

jld